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We claim:

1. An automated method for controlling environmental parameters in a defined -----
environment, said method comprising the steps of:
 - 5 measuring values of temperature, relative humidity, and wind velocity in said
environment;
 converting values of temperature measured at corresponding values of relative
humidity to values of perceived temperature at a constant reference value of relative
humidity; and
 - 10 controlling said environmental parameters based on said values of perceived
temperature.
2. The method of claim 1, wherein said defined environment comprises a chicken
house and said perceived temperature is representative of a temperature perceived by
15 chickens in said chicken house.
3. The method of claim 2, wherein said perceived temperature is a function of a
characteristic of said chickens.
- 20 4. The method of claim 2, wherein said step of controlling comprises activation
and de-activation of fans and related equipment in said chicken house.
5. The method of claim 2, comprising the further steps of:
 - calculating an optimum perceived temperature based on a characteristic of said
25 chickens; and
 - calculating hot and cold stress limits for said chickens based on said optimum
perceived temperature, wherein said hot and cold stress limits correspond to
temperature values above and below said optimal perceived temperature, respectively.
- 30 6. The method of claim 5, comprising the further step of calculating stress levels
experienced by said chickens as a function of said stress limits and said calculated
perceived temperature.

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7. The method of claim 6, comprising the further step of calculating a value of accumulated stress of said chickens during a production cycle.....
- 5 8. The method of claim 3 or claim 5, wherein said characteristic is selected from the group of characteristics consisting of:
- age of said chickens; and
 - weight of said chickens.
- 10 9. The method of claim 1, wherein said perceived temperature comprises a temperature perceived by a living being in said defined environment, said living being selected from the group of living beings:
- human beings;
 - animals;
 - 15 plants;
 - crops;
 - pigs; and
 - poultry.
- 20 10. An apparatus for controlling environmental parameters in a defined environment, said apparatus comprising:
- a memory unit for storing data and instructions to be performed by a processing unit; and
 - a processing unit coupled to said memory unit, said processing unit programmed
 - 25 to:
- obtain measured values of temperature, relative humidity, and wind velocity relating to said environment;
 - convert values of temperature measured at corresponding values of relative humidity to values of perceived temperature at a constant reference value of relative
 - 30 humidity; and
 - provide said values of perceived temperature for controlling said environmental parameters.

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11. The apparatus of claim 10, further comprising an interface for providing said values of perceived temperature to an environmental controller.-----
- 5 12. The apparatus of claim 10, further comprising a controller for controlling said environmental parameters in response to said values of perceived temperature.
13. The apparatus of claim 10, wherein said defined environment comprises a chicken house and said perceived temperature is representative of a temperature
10 perceived by chickens in said chicken house.
14. The apparatus of claim 13, wherein said processing unit is further programmed to calculate said perceived temperature as a function of a characteristic of said chickens.
- 15 15. The apparatus of claim 13, wherein said processing unit is programmed to activate and de-activate fans and related equipment in said chicken house.
16. The apparatus of claim 13, wherein said processing unit is further programmed
20 to:
calculate an optimum perceived temperature based on a characteristic of said chickens; and
calculate hot and cold stress limits for said chickens based on said optimum perceived temperature, wherein said hot and cold stress limits correspond to
25 temperature values above and below said optimal perceived temperature, respectively.
17. The apparatus of claim 16, wherein said processing unit is further programmed to calculate stress levels experienced by said chickens as a function of said stress limits and said perceived temperature.
- 30 18. The apparatus of claim 17, wherein said processing unit is further programmed to calculate a value of accumulated stress of said chickens during a production cycle.

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19. The apparatus of claim 14 or claim 16, wherein said characteristic is selected from the group of characteristics consisting of:.....

age of said chickens; and

5 weight of said chickens.

20. The apparatus of claim 10, further comprising a manual input for a user to input an indication of prevailing environmental conditions based on a visual observation of said defined environment.

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21. The apparatus of claim 10, wherein said perceived temperature comprises a temperature perceived by a living being in said defined environment, said living being selected from the group of living beings:

human beings;

15 animals;

plants;

crops;

pigs; and

poultry.

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22. A computer program product comprising a computer readable medium having a computer program recorded therein for controlling environmental parameters in a defined environment; said computer program product comprising:

25 computer program code means for measuring values of temperature, relative humidity, and wind velocity in said environment;

computer program code means for converting values of temperature measured at corresponding values of relative humidity to values of perceived temperature at a constant reference value of relative humidity; and

30 computer program code means for outputting said values of perceived temperature for controlling said environmental parameters.

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23. The computer program product of claim 22, further comprising computer program code means for controlling said environmental parameters in response to said values of perceived temperature.
- 5 24. The computer program product of claim 22, wherein said defined environment comprises a chicken house and said perceived temperature is representative of a temperature perceived by chickens in said chicken house.
- 10 25. The computer program product of claim 24, wherein said perceived temperature is calculated as a function of a characteristic of said chickens.
- 15 26. The computer program product of claim 24, further comprising computer program code means for activating and de-activating fans and related equipment in said chicken house.
27. The computer program product of claim 24, further comprising computer program code means for:
- calculating an optimum perceived temperature based on a characteristic of said chickens; and
- 20 calculating hot and cold stress limits for said chickens based on said optimum perceived temperature, wherein said hot and cold stress limits correspond to temperature values above and below said optimal perceived temperature, respectively.
28. The computer program product of claim 27, further comprising computer program code means for calculating stress levels experienced by said chickens as a
- 25 function of said stress limits and said perceived temperature.
29. The computer program product of claim 28, further comprising computer program code means for calculating a value of accumulated stress of said chickens
- 30 during a production cycle.

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30. The computer program product of claim 25 or claim 27, wherein said characteristic is selected from the group of characteristics consisting of:

age of said chickens; and
weight of said chickens.

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31. The computer program product of claim 22, wherein said perceived temperature comprises a temperature perceived by a living being in said defined environment, said living being selected from the group of living beings:

human beings;

10 animals;

plants;

crops;

pigs; and

poultry.

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32. The method of claim 1, comprising the further step of determining wind chill based on said measured values of temperature and wind velocity, and wherein said perceived temperature is calculated as a function of said wind chill-compensated value of said measured temperature.

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33. The method of claim 32, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon occupants of said defined environment.

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34. The apparatus of claim 10, wherein said processing unit is programmed to determine wind chill based on said measured values of temperature and wind velocity, and calculate said perceived temperature as a function of said wind chill-compensated value of said measured temperature.

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35. The apparatus of claim 34, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured

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temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon occupants of said defined environment.

36. The computer program product of claim 22, further comprising computer
5 program code for determining wind chill based on said measured values of temperature and wind velocity, and computer program code for calculating said perceived temperature as a function of said wind chill-compensated value of said measured temperature.

10 37. The computer program of claim 36, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon occupants of said defined environment.

15 38. An automated method for controlling environmental parameters in a chicken house, said method comprising the steps of:

measuring values of temperature, relative humidity, and wind velocity in said chicken house;

determining wind chill as a function of said measured values of temperature and
20 wind velocity, and at least one characteristic of chickens in said chicken house;

determining values of perceived temperature at a constant reference value of relative humidity as a function of corresponding wind chill-compensated values of temperature measured at corresponding values of relative humidity and at least one
characteristic of chickens in said chicken house; and

25 controlling said environmental parameters based on said values of perceived temperature.

39. The method of claim 38, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured
30 temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon the age or weight of the chickens in said chicken house.

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40. An apparatus for controlling environmental parameters in a chicken house, said apparatus comprising:

a memory unit for storing data and instructions to be performed by a processing unit; and

5 a processing unit coupled to said memory unit, said processing unit programmed to:

obtain measured values of temperature, relative humidity, and wind velocity in said chicken house;

determine wind chill as a function of said measured values of temperature and
10 wind velocity, and at least one characteristic of chickens in said chicken house;

determine values of perceived temperature at a constant reference value of relative humidity as a function of corresponding wind chill-compensated values of temperature measured at corresponding values of relative humidity and at least one characteristic of chickens in said chicken house; and

15 control said environmental parameters based on said values of perceived temperature.

41. The apparatus of claim 40, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured
20 temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon the age or weight of the chickens in said chicken house.

42. A computer program product comprising a computer readable medium having a computer program recorded therein for controlling environmental parameters in a
25 chicken house, said computer program product comprising:

computer program code means for measuring values of temperature, relative humidity, and wind velocity in said chicken house;

computer program code means for determining wind chill as a function of said measured values of temperature and wind velocity, and at least one characteristic of
30 chickens in said chicken house;

computer program code means for determining values of perceived temperature at a constant reference value of relative humidity as a function of corresponding wind

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chill-compensated values of temperature measured at corresponding values of relative humidity and at least one characteristic of chickens in said chicken house; and

computer program code means for outputting said values of perceived temperature for controlling said environmental parameters.

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43. The computer program product of claim 42, wherein said wind chill (WC) is calculated according to the equation $WC = V^p(a + bT + cT^2 + dT^3 + eT^4)$, wherein T = measured temperature, V = wind velocity, and a , b , c , d , e and p are values dependent upon the age or weight of the chickens in said chicken house.